## (19) World Intellectual Property **Organization** International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

**PCT** 

## (10) International Publication Number WO 2005/055372 A1

(51) International Patent Classification<sup>7</sup>: 12/24, 13/52

H01R 12/08,

(21) International Application Number:

PCT/EP2004/013584

(22) International Filing Date:

30 November 2004 (30.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

203 19 011.4

5 December 2003 (05.12.2003) DE

(71) Applicant (for all designated States except US): MOLEX INCORPORATED [US/US]; 2222 Wellington Court, Lisle, IL 60532 (US).

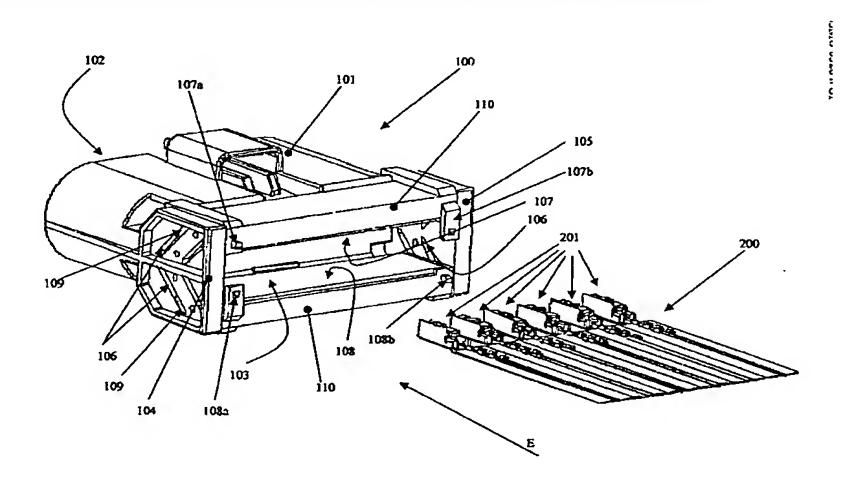
(72) Inventors; and

(75) Inventors/Applicants (for US only): ANDRE, Marcel [FR/FR]; 276, rue d'Artois, F-77550 Moissy Cramayel (FR). ARMAND, Jannick [FR/FR]; 7, rue St Just Le Martel, F-67630 Lauterbourg (FR). STICKEIR, Laurent [FR/FR]; 11, Résidence Guillaume de Voisin, F-91190 Gif sur Yvette (FR).

- (74) Agent: KAMPFENKEL, Klaus; Blumbach Zinngrebe, Alexandrastr. 5, 65187 Wiesbaden (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: FLAT CABLE CONNECTORS FOR SEALED APPLICATIONS



(57) Abstract: The invention relates to a flat cable connector for sealed applications. An object of the invention is to show a new and considerably improved kind of a flat cable connector for sealed applications, compared to the current state of the art. The invention proposes a connector (100) for a sealed connection of a flat cable arrangement (200), with an external housing (101), with an insertion opening (103) for the insertion of the flat cable arrangement (200), with at least one sealing element (107, 108, 107', 108', 107", 108") comprising compressed gel, which can be so arranged at the connecting point of the insertion opening (103) for the flat cable arrangement, that it only comes into effective contact with the flat cable arrangement (200) when the flat cable arrangement (200) is in an inserted condition and with a device (110, 107a, 108a, 107b, 108b, 120, 121, 122, 130, 120) for the pressurization of the at least one sealing element (107, 108, 107', 108', 107", 108") for sealing at least the connecting point when the flat cable arrangement is in inserted state.

## WO 2005/055372 A1



## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.